A NEW RECORD OF ATTACKS BY *PEDILUS* (PEDILIDAE) ON *MELOE* (MELOIDAE: COLEOPTERA)[1]

Laurent LeSage, Yves Bousquet[2]

ABSTRACT: Two specimens of the pedilid beetle, *Pedilus lugubris* (Say), were found on a male meloid, *Meloe angusticollis* Say in Rigaud, Québec. They had severely damaged the meloid beetle by partially chewing the elytra. Photographs of the beetles and of the elytral damage are provided.

The first North American record of *Pedilus* attacking *Meloe* adults was reported by Say (1826), who stated that the type-specimen of *Pedilus impressus* (Say) was found attached to the side of an adult *Meloe angusticollis* Say. Leech (1934) observed elytra of *Meloe niger* Kirby partially eaten by *Pedilus monticola* (Horn), and Pinto & Selander (1970) made similar observations involving *Pedilus terminalis* (Say) attacking *Meloe angusticollis* Say and *M. americanus* Leach. The purposes of this note are to present a new record of attack by *Pedilus* and to illustrate the damage caused to the elytra of meloid beetles.

During a collecting trip at Rigaud, Québec (45° 29'N; 74° 18'W) on May 17, 1982 we found a male and a female of the blister beetle *Meloe angusticollis* Say crawling on a trail in a deciduous forest. The male meloid (Fig. 1a) attracted attention because it was bearing two smaller black beetles, *Pedilus lugubris* (Say) (Fig. 1b) on its dorsal surface. All beetles were brought to the laboratory and placed together in a transparent plastic container for observations. Apparently the meloid beetles did not pay attention to the two *Pedilus* but seemed stressed by their confinement in the plastic container. The two *Pedilus* were very active, crawling on the dorsal surface of the male meloid and feeding on its elytra; indeed, the examination of the gut content of one *Pedilus* revealed several setae and small pieces of cuticle similar to those found on *Meloe.* They also quickly located the meloid female and began the same activity on its elytra. Maximum elytral damage was not observed because the *Pedilus* were killed and preserved for determination. The purpose of such a chewing behavior is still a mystery.

An examination of the Meloe beetles in the Canadian National Collection, about 400 specimens, did not reveal any specimens with similar damage to the elytra. Consequently, attack by *Pedilus* on *Meloe* seems to be a rare phenomenon. However, more material and additional observa-

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[2]Biosystematics Research Institute, Agriculture Canada, Ottawa, Ontario, K1A OC6 Canada.

tions are needed to determine if this rarity is real or apparent, and we hope our note will stimulate research in this area.

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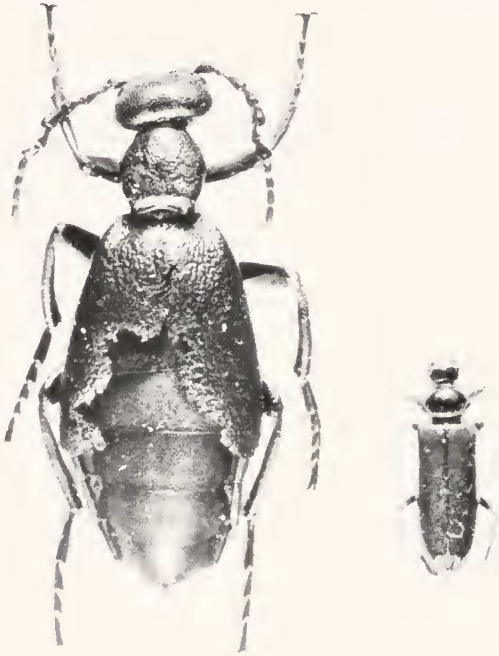

Figure 1. Dorsal view of: left, *Meloe angusticolis* Say; right, *Pedilus lugubris* (Say); both at the same scale (enlargement: about 3 times).

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